



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,673	09/21/2001	Thomas Jaskiewicz	SMQ-076	5611

959 7590 11/25/2005

LAHIVE & COCKFIELD, LLP.
28 STATE STREET
BOSTON, MA 02109

EXAMINER

POLTORAK, PIOTR

ART UNIT PAPER NUMBER

2134

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,673

Applicant(s)

JASKIEWICZ ET AL.

Examiner

Peter Poltorak

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-9 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9 and 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Amendment, and remarks therein, received on 9/08/2005 have been entered and carefully considered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Response to Amendment

3. Applicant's arguments have been carefully considered but they were not found persuasive.
4. As per claims 1, 9, 13 and 15 applicant argues that "software facility" is software and not a hardware apparatus.
5. Applicant's argument has not been found persuasive.

The examiner points out that although Bakke et al. utilizes hardware apparatus it is software that enables accomplishment of particular tasks. In fact, this is not a unique feature of Bakke et al.'s invention. The examiner points out that software (including software in applicant's invention) would be essentially an abstract (useless) if it were not implemented in some kind of hardware device.

6. As per claims 1 and 15 applicant argues that Bakke did not teach that the policy is received from an authorized user and that the user has authority to control access to the storage locations on the network. Also, applicant argues that other references cited by the examiner teach group policy rather than storage policies. As a result applicant argues that there is no motivation to combine Bakke's invention with Windows 2000.

7. Applicant's argument has not been found persuasive.

Windows 2000 references cited by the examiner are merely an example of policies that authorized users can implement. Benefit of policies (either storage or others) and need to restrict administration of policies to only authorized users are old and well-known in the art of computing. Furthermore, policies in Windows 2000 are also used to administer storage issues (*e.g. disk quota limit, pg. 1, share folders pg. 2, Cook, "Windows 2000 Group Policies", 2000, www.itp-journals.com, etc.*).

8. Claims 1-3 and 5-17 have been examined.

Claim Objections

9. Claims 1-3 and 5-14 are objected to because of the following informalities.
10. The limitation: "based on at least one attributes" in claim 1 should read "based on at least one attribute" or "based on at least one of the attributes".
11. In various claims (*e.g. claim 1, 5-6, 12-13 etc.*) applicant replaced most of the articles "said" with articles "the". For the purpose of consistency applicant should select a uniform format (*e.g. replace the remaining "said" articles with the articles "the". See claims 6, 10, 14 etc.*) and amend the claims respectively.
12. Claims 2-3 and 5-14 are objected by virtue of their dependence.
- Appropriate correction is required.

Claim Rejections - 35 USC § 112

Art Unit: 2134

13. Claims 12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.

14. The terms: "the host" (claim 12) and "said host" (claim 14) lack antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

15. Claims 1-3, 5-9 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bakke et al.* (U.S. Patent No. 6330621) in view of *Microsoft 2000* as illustrated by *Brown* (*Brown et al.*, "Microsoft Windows 2000 Server Unleashed, ISBN: 0672317397), *Microsoft* ("Microsoft Windows 2000 Server: Distributed Systems Guide", Microsoft Corporation, ISBN: 15723218058) and *TechNet* ("Automating Administrative Tasks, Policies and Procedures, <http://www.microsoft.com/technet/prodtechnol/windows2000serv/maintain/operate/04w2kada.mspx?pf=true>).

16. As per claims 1-2, 11, 14-16 *Bakke et al.* teach an intelligent data storage manager (IDSM) 110 connected to a plurality of hosts 111-114. IDSM comprises a plurality of data storage devices (*Fig. 1*). Data from the plurality of hosts is received by name servers and handled by an object handle server that maps (using policies) the data into data space for storage determined by the logical device manager. A logical device comprises physical devices such as RAID disk array, tapes and optical devices (*Fig. 1 and col. 2 line 57- col. 3 line 17*).

This reads on providing a software facility with the plurality of storage locations.

17. IDSM comprises a policy manager that handles allocation of data received from the hosts (*col. 3 lines 1-2 and 8-12*). Storage device support attributes and provides an algorithmic way to use these attributes to determine the perfect device, as specified by a policy (*Table 1, pg. 3-4 and col. 5 lines 43-63*).

This reads on the software facility identifying and allocating the storage locations to a storage owner based on at least one attribute of the storage locations and on programmatically applying the storage policy to storage decisions on the network using the software facility, the storage decisions determining where data on the network is stored.

18. *Bakke et al.* teach data storage manager that evaluates available devices and compares it with the policy defined by a user (*col. 7 lines 16-39*).

This reads on receiving with the software facility a network storage policy from a user.

19. *Bakket et al.* do not explicitly teach that the software facility communicates with the plurality of storage locations over the network.

20. However, the choice of accessing the plurality of storage locations either locally or over the network would not affect the functionality of the invention.

In addition accessing a plurality of storage locations over the network is old and well-known in the art of computing (*less expensive but slower medium such as tapes are often kept in remote locations*). One of ordinary skill in the art at the time of applicant's invention would have been motivated to configure the software facility to

Art Unit: 2134

access a plurality of storage locations over the network given the benefit of cost and flexibility.

Lastly, even in the case where a medium is accessed locally the data signals are communicated over a network comprising various components (*e.g. buses*).

21. *Bakke et al.* do not explicitly teach that the policy is received from an authorized user, who has authority to control access to the storage.

22. *Microsoft 2000* teaches network policies wherein an authorized user (*administrator, Brown, Predefined Default Groups section and TechNet, Group Policy Management section*) selects attributes from a list (*Microsoft, Administrative Templates section and Fig. 22.3*) and a network location that receives the network policy from an authorized user (*Microsoft Tech, Creating and Editing Site, Domain, and Unit Policies section*).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to accept a network storage policy from an authorized user, who has authority to control access to said storage locations on said network as taught by *Microsoft 2000*. One of ordinary skill in the art would have been motivated to perform such a modification to use the policy in order to establish and maintain a wide range configuration while simplifying process management.

Administrators have authority to control access to storage location.

23. As per claims 3, 5-6, 12-13 and 17 *Bakke et al.* teaches that all devices have a set of attributes that are used to determine a storage device, as specified by user policy (*col. 5 lines 60-65*) and configuring storage locations to provide specified attributes

Art Unit: 2134

pursuant to the network storage policy (*col. 3 lines 27-50*). The logical device manager uses weighted values that are assigned to each of the presently defined logical devices to produce a best fit solution to the requested policies and maps the virtual device to the user data (*Col. 3 lines 32-36*). In the storage policy implementation the intelligent storage manager creates a composite virtual device that implements the defined desire data storage characteristics through a plurality of storage locations (*col. 4 line 29-col. 5 line 11*).

24. As per claims 7-8 *Bakke et al.* do not explicitly teach placing an unallocated storage location in a pool of storage locations available. *Bakke et al.* also do not explicitly teach placing a storage location into a pool of storage locations marked as previously allocated.

However, Official Notice is taken that it is old and well-known practice to keep track of allocated and unallocated storage locations. One of ordinary skill in the art at the time of applicant's invention would have been motivated to track allocated and unallocated storage locations in order to provide data integrity.

Placing an unallocated storage location in a pool of storage locations available and newly allocated storage locations into the pool of the pool of storage locations marked as allocated would be implicit.

25. As per claim 9 *Bakke et al.* do not teach placing the newly discovered unallocated storage locations into a pool of storage locations awaiting further action by the software facility.

Official Notice is taken that it is old and well-known practice to add new storage devices and that storage devices contain storage locations. It is also old and well-known that the discovered new devices are awaiting further actions (e.g. allocating, formatting, etc.) One of ordinary skill in the art at the time of applicant's invention would have been motivated to introduce a new storage device to increase potential storage space and to replace faulty devices.

26. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Bakke et al.* (U.S. Patent No. 6330621) in view of *Microsoft 2000* as illustrated by *Brown (Brown et al., "Microsoft Windows 2000 Server Unleashed, ISBN: 0672317397), Microsoft ("Microsoft Windows 2000 Server: Distributed Systems Guide", Microsoft Corporation, ISBN: 15723218058) and TechNet ("Automating Administrative Tasks, Policies and Procedures, <http://www.microsoft.com/technet/prodtechnol/windows2000serv/maintain/operate/04w2kada.mspx?pf=true>) and further in view of RFC 2165.*

27. *Bakke et al.* teach the software facility in communication over the network with the plurality of storage locations.

28. *Bakke et al.* do not teach that the software facility uses the SLP to identify available devices attached to the network.

29. *RFC 2165* teaches a software facility that uses the SLP to identify available devices attached to the network (*Introduction*).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to configure the software facility to use SLP to identify available devices

attached to the network as taught by *RFC 2165*. One of ordinary skill in the art would have been motivated to perform such a modification in order to eliminate the need for a user to know the name of a network host.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.


Art Unit: 2134

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Signature

11/17/05
Date


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2134